

WHAT IS CLAIMED IS:

1. A horizontally opposed four-stroke internal combustion engine comprising:
a cylinder block having at least one cylinder bore horizontally extended to both
ends thereof;

5 at least one piston inserted within the at least one cylinder bore, each of the at least
one cylinder bores being divided into two combustion chambers; and
a pair of crankshafts respectively disposed at both ends of the cylinder block and
driven by the at least one piston reciprocating in the at least one cylinder bore.

10 2. The engine of claim 1, wherein each of the combustion chambers is covered
with a cylinder head on which at least one intake valve, at least one exhaust valve, and a
spark plug are mounted.

3. The engine of claim 2, wherein a hole is formed through the cylinder head
such that the both ends of the piston are extended through the hole.

15 4. The engine of claim 3, wherein a piston ring is interposed between the hole
and the end of the piston.

5. The engine of claim 4, wherein each end of the piston is respectively
connected to one of the pair of crankshafts with a connecting rod.

20 6. The engine of claim 5, further comprising:
at least one valve for each of intake and exhaust for each of the combustion
chambers; and
at least one cam shaft for driving the at least one valve,
wherein the cam shaft is driven by the crankshaft through gears.

25 7. The engine of claim 6, wherein the two combustion chambers formed by
being divided by the piston include a first combustion chamber and a second combustion
chamber,

wherein the relationship between the four strokes in the two combustion chambers is as shown in the table below:

	1 st stroke	2 nd stroke	3 rd stroke	4 th stroke
1 st combustion chamber	Intake	Comp.	Ignition	Exhaust
2 nd combustion chamber	Comp.	Ignition	Exhaust	Intake

8. An internal combustion engine, comprising:
a cylinder block defining an engine cylinder having two ends; and
a piston configured and dimensioned to be disposed within said engine cylinder;
wherein said piston reciprocates within said engine cylinder and interacts with each said end of said engine cylinder.

9. The engine of claim 8, wherein each end further comprises intake and exhaust valves.

10. The engine of claim 8, wherein said piston is coupled through said end to a crankshaft.

11. The engine of claim 8, wherein said piston is coupled through each said end to crankshafts.

12. The engine of claim 8, further comprising a spark plug disposed near each end.

13. An internal combustion engine, comprising:
a cylinder block defining an engine cylinder having two substantially closed ends;
and

a piston configured and dimensioned to be disposed within said engine cylinder;
wherein said piston compresses gaseous matter towards each end upon reciprocating toward each end.

14. The engine of claim 13, wherein each end further comprises intake and exhaust valves.

15. The engine of claim 13, wherein said piston is coupled through said end to a crankshaft.

5 16. The engine of claim 13, wherein said piston is coupled through each said end to crankshafts.

17. The engine of claim 13, further comprising a spark plug disposed near each end.